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ROBERT SESSIONS WOODWORTH

1869—1962

A Biographical Memoir by

CLARENCE H. GRAHAM

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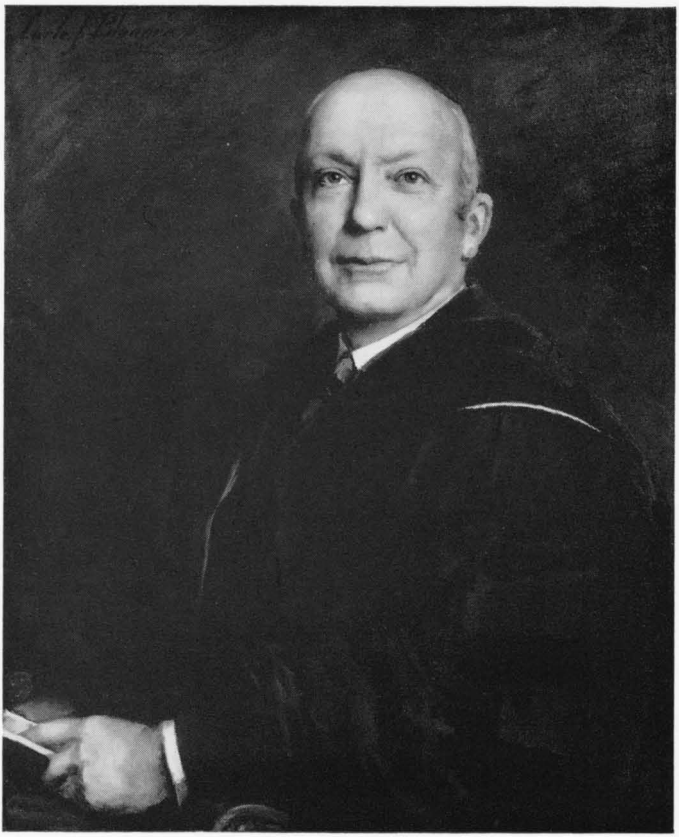

R S Woodworth

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October 17, 1869–July 4, 1962

BY CLARENCE H. GRAHAM

ROBERT S. WOODWORTH retired in June 1945 as Professor of Psychology of Columbia University, aged seventy-five. In 1945 Columbia had no regulation concerning retirement age, owing, it was believed, to the fact that such a rule had never been acceptable to Nicholas Murray Butler, who was then, at eighty-three, just giving up his duties as President. Although Woodworth became Professor Emeritus in 1945, he continued to lecture in the Extension Division of the University, which later became the School of General Studies.

In 1957 I was departmental Executive Officer and received a telephone call from Vice-President Krout who asked me to explain why Woodworth was still teaching at the age of eighty-eight. Krout told me that this situation was contrary to a regulation passed in 1948 under President Eisenhower specifying that members of the staff of instruction must retire by the age of sixty-eight. I wrote Krout a letter requesting that an exception be made in this case, explaining that Woodworth, with his long history in psychology, represented to students such an unusual firsthand contact with early workers and subject matter that good reason existed for keeping him on as lecturer. Krout finally seemed reconciled to the fact that even a man who had broken regulations for ten years should, nevertheless, receive at least one year's notice of retirement, and he therefore ruled that Woodworth might remain as a lecturer until June

1958, but not thereafter. Final retirement came, then, to Woodworth four months short of his ninetieth birthday.

I became a member of the staff at Columbia in July 1945, and my personal knowledge of Woodworth dates largely from this time. I had, of course, known him by reputation during my college and especially my graduate days. Even at the time I received my doctorate in 1930 Woodworth was considered one of the deans of experimental psychology; he had probably just then completed writing his autobiography which appeared in 1932. Without going into elaborate details of his life, it may be useful for me to report, mainly from his autobiography and other sources, some aspects of his education, interests, personality, and activities prior to the seventeen-year period when I knew him, from 1945 to his death in 1962.

We know a good deal about various periods of Woodworth's life. His autobiography[1] gives us a fairly full account of his life up to about 1930. The excellent biography by Georgene Seward[2] extends the account until 1958, and A. T. Poffenberger[3] has written a sympathetic biographical memoir that appeared six months after Woodworth's death. Shorter obituary notices have been written by Edna Heidbreder,[4] Mary Rose Sheehan,[5] and Gardner Murphy.[6] Finally, the volume *Current*

1 "Robert S. Woodworth," in C. Murchison, ed., *A History of Psychology in Autobiography,* 2:359 (Worcester, Mass., Clark University Press, 1932). Additional genealogical information has been supplied to the writer by Professor Woodworth's daughter, Mrs. Richard Herron.

2 Georgene H. Seward, "Woodworth, the Man as a 'Case History.'" in G. H. Seward and J. P. Seward, eds., *Current Psychological Issues* (New York, Henry Holt and Co., 1958), 3.

3 A. T. Poffenberger, "Robert Sessions Woodworth: 1869-1962," *Amer. J. Psychol.,* 75(1962):677.

4 Edna Heidbreder, "Robert Sessions Woodworth, 1869-1962," *Brit. J. Psychol.,* 54(1963):199.

5 Mary R. Sheehan, "Robert Sessions Woodworth (1869-1962)," in *Year Book of the American Philosophical Society, 1962* (Philadelphia, American Philosophical Society, 1963), 194.

6 G. Murphy, "Robert Sessions Woodworth, 1869-1962," *American Psychologist,* 18(1963):131.

Psychological Issues,[7] written by fourteen contributors to celebrate his ninetieth birthday, provides a wide-ranging basis for estimating his interests and influence.

Woodworth was born October 17, 1869, in Belchertown, Massachusetts. His father, a graduate of Yale College and Yale Divinity School, was minister of the Congregational Church in Belchertown. His mother was a graduate of Mount Holyoke College and taught there for a time; she was the founder and first principal of the Lake Erie Female Seminary in Painesville, Ohio, now known as Lake Erie College. Woodworth's father was married three times and had children from each marriage. Woodworth was the son of the third wife and was born when his father was fifty-five years old. Thus, as some colleagues have pointed out, Woodworth is of a line that, from grandfather (born in 1785) to grandson, nearly spans the total period of United States history up to 1962. Woodworth went to high school in Newton, Massachusetts, while living with his sister in that town. He was aiming for the ministry when he went to Amherst College and there for his first three years he was primarily interested in the classics and mathematics. In his final year he came under the influence of Charles Edward Garman, a professor of philosophy who, Woodworth states, was "a splendid and remarkable man, regarded by nearly all his students as the best teacher they ever had." It was Garman's influence that directed Woodworth toward philosophy, psychology, and science. Following college, Woodworth taught mathematics and science for two years in a secondary school and mathematics for two more at Washburn College in Topeka, Kansas. After this four-year introduction to teaching, Woodworth entered Harvard in the fall of 1895 fairly well focused on a career in philosophy and psychology. At Harvard he worked

[7] Georgene H. Seward and J. P. Seward, eds., *Current Psychological Issues* (New York, Henry Holt and Co., 1958).

with Royce, James, Santayana, and Delabarre and started a lifelong friendship with two graduate students, E. L. Thorndike and W. B. Cannon. Following an M. A. from Harvard in 1897, he served as assistant in physiology at the Harvard Medical School and was there when James McKeen Cattell offered him a fellowship at Columbia for the year 1898-1899. He received the Ph.D. in psychology from Columbia in 1899, based on a dissertation entitled *The Accuracy of Voluntary Movement.* Following the doctorate, Woodworth became Instructor in Physiology at Columbia and Bellevue Hospital Medical College, where he taught until 1902. Few if any postdoctoral fellowships were available in 1900, but Woodworth managed to spend the summer of 1900 with E. Schäfer (later Sir Edward Sharpey-Schäfer) at the University of Edinburgh. Meanwhile Thorndike had gone from Harvard to Columbia for a Ph.D. under Cattell; he received an appointment at Teachers College in 1899. There Woodworth (while teaching physiology) and Thorndike renewed their collaboration in an important series of investigations on transfer of training. The concepts coming from these studies of the "transfer of identical elements" and the "exercise of neural connections" became central topics in the literature of psychology and education.

In pursuance of his training in physiology, Woodworth went to the University of Liverpool in 1902 and worked in the laboratory of Charles (later Sir Charles) Sherrington, who appointed Woodworth Senior Demonstrator in Physiology. Sherrington had hoped that Woodworth would develop at Liverpool a program in experimental psychology and brain physiology, but an offer came from Cattell at Columbia and Woodworth returned to New York in 1903. During his stay at Liverpool he collaborated with Sherrington on a study investigating the spinal pathways for pain in the decerebrate cat. During the experiment they observed behavior which they called "pseudaffec-

tive," in which responses to nociceptive stimulation of the skin seemed to simulate memetic expressions of anger and defense, such as retraction of lips and tongue, snapping of jaws, etc. All of the responses were brief, however, and did not outlast stimulation; in this respect they were unlike anger and rage in an intact cat. This experiment has an honorable place in the sequence of pioneer studies bearing on the problem of central neural organization in emotion. It is surely one of the more important researches in which Woodworth engaged. Another, equally important, was his earlier work with Thorndike on transfer of training. Strangely, neither of these studies is mentioned in the autobiography.

Woodworth's return to Columbia resulted in a change in orientation of his interests and a decision to restrict his efforts to psychology. He was henceforth so concerned with activities at Columbia that the program on brain function proposed by Sherrington did not seem feasible in New York. He remained interested to some extent in physiological interpretations of psychological processes, and some of his students did work in physiological psychology. But, except for his revision of Ladd's *Physiological Psychology* in 1911, it is probable that the topic became less and less emphasized in Woodworth's thinking. From 1903 on, Woodworth stayed at Columbia and, except for periods (for example, the interval in 1912 spent in Kulpe's laboratory, the period in 1924-1925 when he was on staff appointment at the National Research Council, and the year 1931-1932 when he was President of the Social Science Research Council), the main focus of his interest was teaching and writing in the Department of Psychology at Columbia.

What were Woodworth's main interests in psychology during his long stay at Columbia? One might say that he was interested in almost everything. His interests in the early years there go back to his studies with Royce and James. For ex-

ample, he did work on the perception of time (an interest from his days in graduate school) which was never published, although later some of his students worked on the problem. Another of his interests, originating from his graduate study, was concerned with a dictum of Max Müller that thought does not exist without language. Woodworth was convinced that this conclusion was wrong and supported his opinion (to his own satisfaction) by results from some experiments on counting by rhythmical groupings. The experiment was not published.

The most important of his experiments at Columbia were the ones conducted with Thorndike on transfer of training. The experiments had a great influence on educational doctrines. The doctrine of formal discipline, which has had a longer and more persistent effect than it may deserve, holds that the disciplinary function of education is paramount; with training and long exercise in almost any hard intellectual effort the "mind takes on strength, agility, and flexibility" in almost all functions: the harder the effort, the greater the general benefit. (Of course it was long held that the appropriate effect is best supplied by those subjects of superior disciplinary value, e.g., Latin, mathematics, and foreign languages.) Thorndike and Woodworth's experiments provided no support for the doctrine because, they concluded, mental functions show high degrees of specificity. Training in one function may have little or no effect on another.

"It is misleading," they said, "to speak of sense-discrimination, attention, memory, observation, accuracy, quickness, and so forth, since multitudinous, separate, individual functions are referred to by any one of these words. These functions may have little in common. There is no reason to suppose that any general change occurs corresponding to the words, 'improvement of the attention,' or 'of the power of observation,' or 'of accuracy.' . . . The mind is, on the contrary, on its dynamic

side, a machine for making particular reactions to particular situations. It works in great detail, adapting itself to the special data of which it has had experience. The word *attention,* for example, can properly mean only the sum total of all the particular abilities and inabilities, each of which may have an efficiency largely irrespective of the efficiencies of the rest."[8]

One possible side effect of this and similar investigations was to supply ammunition for critics of classical curricula. At any rate, whether owing to the influence of the work on transfer or to other factors, the important position in curricula of the classical languages was weakened. They now may be studied in their own right and for their own values, but they are no longer taken to have special virtues as "strengtheners of the fiber of the mind."

It will be remembered that Woodworth's thesis was concerned with the voluntary control of muscular movement. This and other studies made soon after resulted (1903) in a monograph, *Le mouvement.* The program on movement led Woodworth to the question of whether or not kinesthetic images necessarily preceded voluntary movement. The analysis led to Woodworth's participation in the "imageless thought" controversy of 1906-1908. His work played a part in relegating images to the minor position that they have occupied since about 1920. Nevertheless, Woodworth opposed the total exclusion of images. He maintained that, although many thinking processes occur without imaginal accompaniment, images, few as they may be, are a fact.

From early in his career and in line with his mathematical background, Woodworth showed an interest in psychophysics, an interest that was mainly technical. He did, as he says, spend "happy days endeavoring to work on some useful statisti-

[8] E. L. Thorndike and R. S. Woodworth, "The Influence of Improvement in One Mental Function upon the Efficiency of Other Functions," *Psychol. Rev.,* 8(1901):247, 384, 583.

cal device or in making statistical computations and graphs." His work on psychophysics, however, did not involve important implications for substantive material such as sensory processes, etc., although, he maintains, the "interest also has borne some fruit in the research of the laboratory." Here he probably means work in perception, the supervision of which he shared with other members of the laboratory after 1928.

From his early days as a graduate student Woodworth was interested in the problem of motivation. He writes: "I remember saying to Thorndike, my fellow student, whose sane positivism was a very salutary influence for a somewhat speculative individual like myself, that I was going to try and develop 'motivology'; and he agreed that it was worth doing. Always searching for some fruitful attack on that problem, I was naturally much interested in the works of Freud and McDougall a little later; and I have taken one or two shots at the problem myself, but have to agree that the desired science of motives is still very embryonic." His interest in motivation remained with him as a major interest to the end of his life. It was certainly important in the formulation of his dynamic psychology.

His thinking about motivation resulted in work on testing. "At various times, from 1904 on, I have," he says, "tried my hand at the devising and perfecting of tests, the chief work of this sort being the joint product of Wells and myself, the *Association Tests* of 1911. The *Psychoneurotic Inventory* or *Personal Data Sheet* was another effort. There have been many student researches in the field of tests that I have supervised more or less closely. Of late, in the division of labor within the Department, I have ceased to concern myself actively with tests, though I will admit that I still have in the back of my mind one or two schemes for tests that I should like to work out."

He describes his work on tests in World War I as follows: "The American Psychological Association entrusted me with the duty of seeking a test for emotional stability. The experience of other armies had shown that liability to 'shell shock' or war neurosis was a handicap almost as serious as low intelligence. After considering other possible emotion tests, I concluded that the best immediate lead lay in the early symptoms of neurotic tendency which the neurologists and psychiatrists were finding in the case histories of neurotic subjects. Collecting hundreds of such symptoms from reported case histories, I threw them into the form of a questionnaire which could be applied to a group of subjects at a time, the single questions to be answered Yes or No. I tried this questionnaire on normal groups, and eliminated questions, or so-called symptoms, which were reported so frequently by the normal subjects that they could scarcely have any diagnostic value. The abridged questionnaire was tried on a thousand recruits in one of the camps, and on small groups of diagnosed abnormal subjects, and the results worked up again and submitted to a conference assembled by the Surgeon General to advise him as to the military use of the questionnaire. The decision was to give the device a trial as part of the psychological examining procedure in one of the camps. Soon afterwards, the War came to a close, leaving the question unsettled as to whether the questionnaire could really assist in discovering the recruits who were specially susceptible to psychoneurosis."

In World War II, of course, personal data sheets similar to that of Woodworth were used under various conditions. They seemed to be useful in aiding psychiatrists to screen recruits in the curtailed psychiatric examination that alone seemed feasible during the "processing" of many thousands of men.

Woodworth's personal experimental work ended early in his career. His interests in mathematics, philosophy, physiology,

and psychology were, following 1903, reduced almost wholly to psychology. His indirect connection with experimental work by way of students ended at the time of his official retirement in 1945.

He was essentially a scholar and not a researcher. In 1932 he summarized his role by saying: "Though my ideal all along has been 'investigation,' and though I have been busy all along with research in an advisory capacity, I have done comparatively little investigation on my own account. Probably my bent is more towards weighing evidence and 'seeing straight' than toward active enterprise. I should have liked to be a discoverer, so that anyone asking, 'What did Woodworth do?' would be promptly answered, 'Why, he was the man who found out' this or that. It is likely that many other psychologists have the same feeling of disillusionment. It seems as if real discoveries, on a par with those in some of the other sciences, simply were not made in psychology. As I diagnose the situation, we started thirty or forty or fifty years ago with a background of philosophical problems. These have gradually disappeared from our view, because they were not genuine psychological problems, and we are left with what seems to be a multitude of rather disconnected problems, none of them appearing as very fundamental. We are, then, passing through the stage of becoming acquainted with our subject matter in detail and for its own sake, and there is no telling when or where discoveries of really fundamental significance may be made—probably where we least expect them."

During the years from 1912 to 1926 (with a year out at the National Research Council in 1924-1925) Woodworth succeeded Cattell as departmental chairman. He says of himself that he was a poor administrator; he was surely glad to turn over the chairmanship to Poffenberger in 1926.

In 1924-1925 Woodworth spent full time as Chairman of the Division of Anthropology and Psychology of the National

Research Council, where he was especially happy about his association with the Committee on the Psychology of the Highway and the Committee on Child Development. These two committees seem to have had useful and continuing influences. The Committee on the Psychology of the Highway had a long existence in the National Research Council. The Committee on Child Development grew into the important Society for Research in Child Development, with its own publications.

Woodworth's interests in psychology were, to a large extent, fully formed by about 1920. The period up to that time saw, except for his work with Ladd on *Physiological Psychology* (1911), a precipitous decline in his physiological interests, so much so that, as Davis reports in *Current Psychological Issues,* there was, by 1930, no course in physiological psychology in the department. He had made a definite decision against his physiological interests when he left Liverpool.

A considerable part of his contributions in the years until about 1930 must be judged to be the books which he wrote. His first major publication was in collaboration with G. T. Ladd in the revision of Ladd's *Physiological Psychology.* The book became known in some quarters as Woodworth's *Physiological Psychology* after it appeared in 1911. In 1918 a book appeared entitled *Dynamic Psychology.* This book went through a number of printings and was an important part of the course given on Wednesday nights by Woodworth. The other book, covering the second semester of the course, was *Contemporary Schools of Psychology,* written in 1931.

The book for which he was best known for many years was *Psychology,* first published in 1921. This book went through four revisions, and a fifth revision was made in 1947 in collaboration with D. G. Marquis. It was an elementary textbook and had the reputation for many years of being *the* most widely used text.

The discussion of his interests as given heretofore is taken mainly from his autobiography and hence gives the account up to about 1930 to 1932. What were his main scholarly interests from 1930 to his retirement in 1945?

In 1931-1932 he was elected President of the Social Science Research Council after serving it for several years in many capacities. In 1941 he made an important contribution under these auspices on the general topic of "Heredity and Environment." This monograph was influential in representing the view that in psychology heredity and environment must be regarded as mutually interacting and complementary influences. It is absurd, Woodworth believed, to argue that one is more important than the other in the individual's development.

Above all, it may be supposed that his main interest until 1938 was in studying for and completing his book *Experimental Psychology,* begun in 1920 with A. T. Poffenberger in the form of mimeographed notes for the class in Advanced Experimental Psychology and remimeographed in 1932. The years from 1932 to 1938 saw the final preparation of the first edition.

In his early days in the Department, Woodworth directed theses in almost all areas of psychology: experimental, abnormal, social, tests and measurements, etc. Later though, in the 1920s "with a larger staff to divide the field, and with the attitude taken by the University (as represented especially by Dean Woodbridge) and by Poffenberger as executive head of the department, that each professor should have his own research interests to which the student must adjust himself, the scattering of effort has mostly disappeared."

His main effort beyond that of work with students, writing, and editing was devoted to the teaching of his famous course, Advanced Experimental Psychology. This course was the major hurdle for all graduate students, and the amount of work was, as one said, "frightening." The student was required to do an

"original" experiment with the laboratory facilities available each time a new topic was taken up in the course, about once every three weeks. The experiment was planned together with the assistant, who played a very important role. The equipment had to be assembled, the subjects run, and the experiments worked out and written up. Of course few, if any, of the students ever finished the course in the year during which it was given. However, Woodworth kept careful track of the experiments owed him, and no student passed the course until all the experimental reports were submitted. Sometimes this took a number of years; so far as I know there was no limit on the period for a mark of Incomplete. One may argue as to the usefulness of the training obtained in this course, a training which often on the experimental side reflected the influence of the assistant, but surely one can be sure of one thing: the course was an important experience for each student, and it was very informative. The areas covered in the course were broadly conceived and fitted to Woodworth's encyclopedic background of information. The topics taken up after the course reached full maturity (about 1935) are represented in the first edition of *Experimental Psychology*. In that book, Woodworth's *magnum opus,* published in 1938, the selection of material is often based on German work. It is noteworthy that the most frequently referred-to authors are G. E. Mueller and Wundt. The book does have a breadth and historical base that must surely have gained the respect of the students taking the course.

Work with students, teaching, editing, reading, and writing were the basic functions seen by Woodworth as constituting his true role. He did take part in professional activities and spent time on them as required, but these were never basic roles. His main effort and contribution were the teaching and directing of students. (How different it is today, when it is not

often said of a student that he did his work with so-and-so, but only that he obtained a degree at such-and-such a university. What a discounting of the significance of the apprentice-teacher relationship!) Certainly people who worked with Woodworth went through an important training experience, perhaps not so much in the domain of laboratory method, but clearly and rigorously in the realms of formulation, exposition, and presentation.

During his long tenure at Columbia Woodworth showed many facets of personality to students, friends, and colleagues. First of all he was his own man and if he was influenced by various people (especially, he says, by Cattell), the influences were never more than partial. Woodworth's quiet and soft manner belied a streak of resistance, especially to what he took to be "doctrinaire" attitudes. In a frequently quoted statement he says: "My bogey men—the men who most irritated me, and from whose domination I was most anxious to keep free—were those who assumed to prescribe in advance what type of results a psychologist must find, and within what limits he must remain. Münsterberg was such a one, with his assertion that scientific psychology could never envisage real life. Titchener was such a one, in insisting that all the genuine findings of psychology must consist of sensations. Watson was such a one, when he announced that introspection must not be employed, and that only motor (and glandular) activities must be discovered. I always rebelled at any such epistemological table of commandments."

Woodworth, for all his eclecticism, was a persistent and stubborn advocate once he had adopted a position. He was eclectic in his psychology; he would support the use of introspective and objective response variables. But he was a strong antagonist of supporters of either alone; in his eyes both groups were extremists who must be resisted. In faculty meetings, his

persistence and soft-spoken support of a position or a student would often win in the end, so it has been said, because Woodworth could outlast almost any opposition.

This quality of giving unshakable support to a student or a position had very desirable effects, especially for students; each felt that he had a supporter in his corner. Woodworth was highly respected and, in later years, revered by many graduate students. One can understand why; when it came to devoting time to students, Woodworth never failed. This is not to say that he was a professor whose office door was always open. In fact the door was rarely open and appointments had to be made with him well in advance through his secretary. His contacts with colleagues were pleasant but formal. Woodworth was a master at meeting a visitor at the door of his office and discussing matters there, not inside. Such procedures were, of course, necessary to maintaining the schedule of a very busy man. He was nevertheless generous in spending time on the rewriting, criticizing, and discussion of theses and thesis work. He was very serious about this duty, and he took it as his main function. In those days all theses at Columbia had to be published. Woodworth's work on a thesis was not complete until the psychology student had seen it appear as a monograph in the *Archives of Psychology* under Woodworth's editorship.

We return now to 1945, the year of Woodworth's retirement as professor. What did he do between the time he retired as professor and his final retirement as lecturer in 1958?

Because of an unexplained and regrettable decision of someone at Columbia (understandable under certain conditions when space is not available, but surely not in a year such as 1945 when there were few students in the University), no office space was supplied to Woodworth. In consequence, he retired to his apartment a block from the University, and con-

tinued his work there, aided as he had been for years by his secretary and loyal friend, Mrs. Enrica Tunnell, who continued to be head of the Psychology Library. There he read, wrote articles, prepared his lectures for the School of General Studies, and, above all, wrote and rewrote books. A case can be made for the statement that Woodworth's best contributions were made in the seventeen years between his retirement in 1945 and his death in 1962.

Probably the most important writing done at this time was on *Experimental Psychology,* rewritten in collaboration with Harold Schlosberg, who died in 1964. This book was a complete rewriting of the original 1938 volume. Emphasis was placed on American work, not because it was American, but because America had, in the period since 1938, developed broad and deep roots in the area of experimental psychology. The book emphasized many topics and treatments of learning, sensory functions, and perception that were not emphasized or even mentioned in the 1938 book. It was, to put it in a nutshell, a new and balanced treatment of the general area of experimental psychology. It has become, in fact, through recent years, the graduate student's "bible."

Also written in this period was *Dynamics of Behavior,* a modification of the 1918 *Dynamic Psychology.* The earlier book had resulted from eight lectures given in 1916-1917 at the American Museum of Natural History. It was to a considerable extent a formulation of "middle-of-the-road" principles developed as a reaction against the doctrines of Titchener, Watson, and McDougall. It had a long-existing place in Woodworth's Wednesday night course. *Dynamics of Behavior,* published in 1958, benefited from the work with Schlosberg on the revision of *Experimental Psychology;* it appeared as a new and exhaustive treatment of material that served as a basis for a modern version of *Dynamic Psychology.*

These years also saw the rewriting in 1948 of *Contemporary Schools of Psychology* (first published in 1931). The 1948 edition was in the process of revision at Woodworth's death. It was finally completed in 1964 by Mary Rose Sheehan. A revision of the famous textbook *Psychology* was written with Donald G. Marquis in 1947, at a time when servicemen returning from World War II required many copies of improved textbooks. Noteworthy in all of this rewriting was the sharpening and increased precision of Woodworth's thinking that went into the topic treatments. From the age of seventy-five to ninety-two, he did not stand still intellectually. He "kept up" in a way that is astounding. All his productions in these late years were in the best line of modern development. I believe they were improvements over his earlier works, mainly because he could now exert a degree of concentration not possible when his efforts ran counter to the distractions of academic existence.

On his seventieth birthday in 1938 Woodworth's colleagues at Columbia presented him with a volume based on a selection of his papers under the title *Psychological Issues* (1939). His ninetieth birthday was again celebrated, this time by approximately two hundred of his students, colleagues, and friends in Washington, D.C., at the annual convention of the American Psychological Association in September 1958. The occasion, which took place about seven weeks before his birthday in October, was marked by the dedication to him of the book appropriately entitled (in the flavor of the 1939 volume) *Current Psychological Issues.* The book contained articles written by fourteen colleagues and former students. Thirteen of the articles represented the general line of Woodworth's interests through the years, and the fourteenth was the biography by Georgene Seward previously mentioned. Each treatment dealt with Woodworth's contributions to a particular subject and considered their connections to the larger context

with which they had merged. The total treatment presented an admirable account and background for the better appreciation of Woodworth's position in a very broad systematic domain. Woodworth and his influence are better understood after a reading of *Current Psychological Issues.*

The birthday celebration also marked the establishment of the Woodworth Fund for Experimental Psychology at Columbia University. This fund received contributions from many psychologists and interested friends. Following the occasion, Woodworth returned to New York City and, some time thereafter, suffered an illness, probably a heart attack, which left him in a weakened condition. Nevertheless, during this period he worked on the revision of *Contemporary Schools of Psychology* with Mary Rose Sheehan.

The final publications that appeared during his lifetime were two biographical memoirs in 1959, one on J. B. Watson, the other on Josiah Royce. Woodworth owed something to both men. His reaction against Watson as one of his group of bogey men was an important influence in stimulating him to formulate his dynamic psychology. To Royce, dead more than forty years at the time of the memoir, Woodworth owed encouragement in his choice of field, for as he writes in the memoir, "When the time arrived for me to make a choice between philosophy and psychology, I had a heart-to-heart talk with Royce and emerged from his study with a clear conviction in favor of psychology." Following the Royce memoir, Woodworth continued to work on *Contemporary Schools.* During the last two years of his life, 1960-1962, he was infirm and lacked his former vitality. He died on July 4, 1962, "full of years and honors."

His honors were many. He was a fellow of the American Academy of Arts and Sciences and a member of the American Philosophical Society. He was elected to the National Academy

of Sciences in 1921. The honorary degree of Sc.D. was conferred upon him by Columbia University in 1929, by the University of North Carolina in 1946, by the University of Pennsylvania in 1946, and by Amherst College in 1951. He was granted an LL.D. by Lake Erie College in 1947. A probably crowning award was presented to him in September 1956 when the first Gold Medal of the American Psychological Foundation was granted him "for distinguished and continuous service to scholarship and research in Psychology and for contributions to the growth of Psychology through the medium of scientific publication." The honor that he may have most appreciated was his election to the presidency of the American Psychological Association in 1914.

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KEY TO ABBREVIATIONS

Am. J. Psychol. = American Journal of Psychology
J. Philosophy = Journal of Philsophy
Psychol. Bull. = Psychological Bulletin
Psychol. Rev. = Psychological Review

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